

ABSTRACT OF THE DISCLOSURE

A method and system for predicting the resistance of a disease to a therapeutic agent is provided. Further provided is a method and system for designing a therapeutic treatment agent for a patient afflicted with a disease. Specifically, the methods use a trained neural network to interpret genotypic information obtained from the disease. The trained neural network is trained using a database of known or determined genotypic mutations that are correlated with phenotypic therapeutic agent resistance. The present invention also provides methods and systems for predicting the probability of a patient developing a genetic disease. A trained neural network for making such predictions is also provided.

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